	r ID 94542 11:41:03 AM		*945	542*	Al	33	\bigcirc	- Lander ad	. Li. Talua r e. s	Page 1	
Revision ID:	D2945 Step Mounting Plate	TO THE SECTION OF LITTLE SECTION SECTI	Accept	*N90	0040	100)* s	etup Stai	rt *N;	S1* S2*	n
Start Date: Required Date: Reference:	12/19/12 Start Qty: 16. 1/11/13 Req'd Qty: 16.			Cust Ite Custom							
Approvals:	Process Plan: MUJ				Date:		R	aun Star Sto	" \	R1* R2*	
Sequence ID/ Work Center ID			Set Up/ Run Hours	Tool I	D Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
Draw Nbr D2945	Revision Nbr Rev A										
*100 *100* Waterjet FLOW CNC Waterje			0.00 0.00 : A Prog Rev:	<u>A</u> 2-			_3a_	Δ		Jmi3 a	F.G.
6061 ,188			0.00	The state of the s							
*110 *110* QC Quality Control	QC2- Inspect parts Memo	off machine FAI/FAIB	0.00				32	<u> </u>		Jm13-	2-9-J
120	QC8- Inspect parts	- second check	0.00 Sm	>							
120	Memo	,	0.00 B. 2				32				

Quality Control

				-								DQA:	Da	te: _	
NCR:	es /	/ No				WORK ORDER NON-O	O	NFORIN	MANCE / UPI	DATE		_		_	
											_	QA Closed:	Da	te:	
						DISPOSITION				AGAINST D	ΕP	ARTMENT	PROCESS		
Work Orde	er: —			 .		Rework	1		Skid-tube	Crosstube	7		Water Jet		Engineering
Part N	lo.					Scrap			Vlachining	Small Fab	\dashv	Pro	d. Eng. Coor.		Quality
Parti	····					Use-as-is	1		noforming	Finishing	1		e/Packaging		Other
NCR N	Vo.					Work Order Update	1 1		Large Fab	Composite	1		Supplier	\blacksquare	
	_						'	į	. •	' L				<u> </u>	
Root					Descri	ption of work order update	1	nitial	Act	tion	T	Sign &			•
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	\vdash	ending				Bend	_	Grain		ļ	-	Ovalized		\vdash	Pressure/Forced
	⊢⊣	entre No	t Concei	ntric to	o/s	BOM/Route	\vdash	Hardwa		<u> </u> -	\dashv	Over/Under		-	Temperature/Cure
	—	racks			<u> </u>	Broken/Damaged		4 `	on Incomplete	}-		Part Incorre		-	Weld
	_	rushed/0	Crimped.		<u> </u>	Burrs	\vdash	4	ions Incomplete/	Unclear	_	Part Lost/M	_	$ldsymbol{le}}}}}}}$	Wrong Stock Pulled
	C	uffs			1	Contamination	1 .	Mainte	enance		ŀ	Part Moved			

Mislabeled

Out of Calibration

Out of Sequence

Outside Dirnensions

Misread

Offset

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Positioned Wrong

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

140 Powdercoat

Powder Coating

Memo

150

QC3-Inspect Part Finish

Quality Control

150

Memo

0.00

0.00

32 d SUB-2-28

Page 2

Insp.

•											DQA	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORM	/IANCE / UP	DATE			
p-p											QA Closed	: Date:	
Work Ord	er.					DISPOSITION				AGAINST DE	PARTMENT	r/PROCESS	
VVOIR OIG	٠				 	Rework	1		Skid-tube	Crosstube]	Water Jet	Engineering
Part i	No.					Scrap		ï	Machining	Small Fab	Pro	od. Eng. Coor.	Quality
	,					Use-as-is]		noforming	Finishing	Rec/Sto	ore/Packaging	Other
NCR I	No.					Work Order Update	}		Large Fab	Composite	j	Supplier	
Root			<u> </u>		Descri	ption of work order update		Initial	Ac	tion	Sign &		<u> </u>
Cause		Date	Step	Qty	1	or Non-conformance		nief Eng		ription	Date	Verification	QC Inspector
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		Centre No	ot Conce	ntric to	o/s	BOM/Route] Hardwa	re		Over/Unde	r tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorr	ect	Weld

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabelec

Misread Offset Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

Wrong Stock Pulled

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio

W۵	rk	Or	der	ID	9454	7
VV U	71 K	vi	uei	w	フサンチ	Z

December-19-12				^94!	147"							Page 3	
Item ID: Revision ID: Item Name:	D2945 Step Mountin	g Plate	<u> </u>	Accept	*N9000	140	100) *	Setup	Start Stop	14.	S1* S2*	
Start Date: Required Date: Reference:	12/19/12	Start Qty: 16.00 Req'd Qty: 16.00	*16* *16*		Cust Item ID Customer:):				G. A			
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):	Dat				Run	Start Stop	1/1	R1* R2*	
Sequence ID/ Work Center II 160 *160* Packaging Packaging	D	Operation Description Identify as per dwg & Sto	shock Location:	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Acce Qty	pt Re Qt		Reject Number	Insp. Stamp	7
170 *170* QC Quality Control		QC21- Final Inspection -	Work Order Release	0.00						3/3	140	D	

*			
NCR:	Yes	/	No

DQA: Date:

NCR:	Yes	/ No				WORK ORDER N	VON-CO	ONFOR	MANCE / UP	PDATE			
									•		QA Closed:	Date:	
Nork Ord	er:					DISPOSITION	N			AGAINST DE	PARTMENT,	PROCESS	
Part	No.					So	vork crap	_	Skid-tube Machining	Crosstube Small Fab	4	Water Jet d. Eng. Coor.	Engineering Quality
NCR	No.					Use-a Work Order Upo		Thern	noforming Large Fab	Finishing Composite	Rec/Stor	re/Packaging Supplier	Other
Root					Descr	iption of work order up	odate	Initial	Ac	ction	Sign &		
Cause		Date	Step	Qty		or Non-conformance		Chief Eng	Desc	cription	Date	Verification	QC Inspector
oc/Data													
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		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs	ľ	Instruc	tions Incomplete	/Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Г	Cuffs	·			Contamination	Ţ	Mainte	enance		Part Moved		-
		Heat Trea	ıt			Countersink	İ	Mislab	eled		Positioned \	V rong	
		Inspection		Tube	-	Cut Too Short	Ţ	Misrea	d		Power Loss/		Other
		Ripples in				Drill Holes	İ	Offset			_	• •	
		Torque W		Extrusio	n	Drawing	Ì		Calibration				
		Turning S			<u> </u>	Finish		-	Sequence				
		Wave/Tw			<u> </u>	Folio	<u> </u>		e Dimensions				

Picklist Print

December-19-12 11:41:02 AM

Work Order ID:

94542

Parent Item:

D2945

Parent Item Name:

Step Mounting Plate

Start Date: 12/19/12

Required Date: 1/11/13

Page 1

Start Qty: 16.00

Required Oty: 16.00

Comments:

IPP B00.01.27Added inspect level 8, removed P/O for powder coatingEC

IPP Rev.C. Now on Wateriet 06-12-13 II M.

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.188		Purchased	No			100	sf	31.7400	0.08	1.347368			
6061-T6 .188 Sheet									C	V25 6	L	Jv	<u>^'3-2-2</u> `
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT021		31.74							

31.74

191235

116604

124572

		•									DQA	: Date:	
NCR:	Yes	/ No				WORK ORDER NON-O	CO	NFORM	MANCE / UP	DATE			
											QA Closed	l: Date:	
Work Ord	.					DISPOSITION				AGAINST D	EPARTMEN	T/PROCESS	
Work Ordi	۲۱.					Rework	1		Skid-tube	Crosstube	٦.	Water Jet	Engineering
Part!	VI.O.					Scrap	1	l.	Machining	Small Fab	- -	od. Eng. Coor.	Quality
Fait	NO.					Use-as-is	1 1		noforming	Finishing	-	ore/Packaging	Other
NCR	۷n					Work Order Update	1		Large Fab	Composite	1 1100/31	Supplier	
110111	•0.						_}		20.80 1 00				بے د
Root					Descri	ption of work order update		nitial	Act	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
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Equip/Tooling												İ	
Operator		i											
Material												,	
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Supplier													
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	_	Bending				Bend	\perp	Grain			Ovalized	_	Pressure/Forced
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		Cracks			<u></u>	Broken/Damaged		Inspect	ion Incomplete		Part Incor		Weld
	ĺ	Crushed/	Crimped.			Burrs		Instruct	tions Incomplete/	Unclear	Part Lost/I	Missing	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Part Moved

Positioned Wrong

Power Loss/Surge

Other

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing `

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

DART AEROSPACE LTD	Work Order:	94842
Description: Step Mounting Plate	Part Number:	D2945
Inspection Dwg: D2945 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

		X First A	Article	Pro	totype
ng	Tolerance	Actual	Accent	Poince	Method

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.764	+/-0.005	1.766	_		V	Jkmo1
R0.38	+/-0.010	8.38	-		ŘG	JAMOI
2.715	+/-0.005	2.718"	_		V	
0.895	+/-0.010	0.895	-		V.	
4.13	+/-0.030	4,13"	_		V	
0.750	+/-0.010	0.7604	_		V	,
0.885	+/-0.005	0,887"	_		V	
R0.400	+/-0.010	0.400"	~		RG	
Ø0.257	+0.005/-0.000	Q353°	_		V	
	·					
	_					
				I		

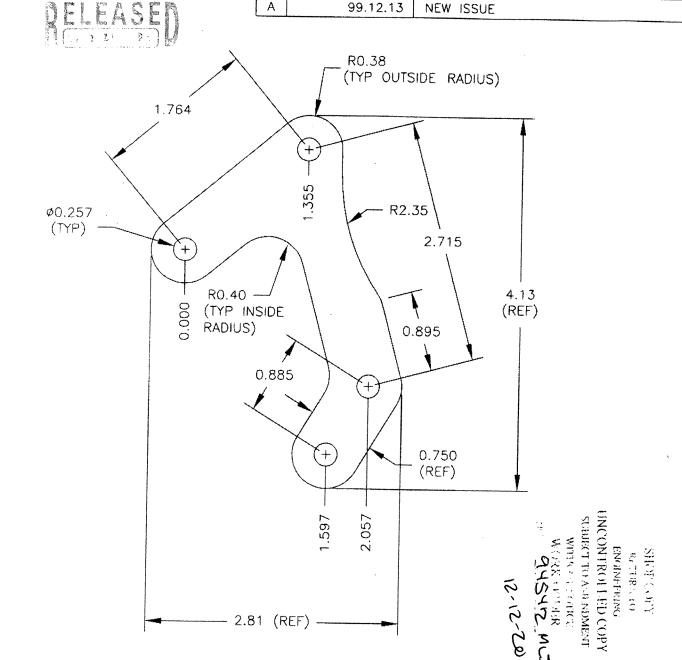
Measured by: 」 プm	Audited by:	Smp	Prototype Approval:	N/A
Date: 3-2-27	Date:	130 27	Date:	N/A

Rev	Date	Change	Revised by	Approx/ed
Α	05.02.17	New Issue	KJ/JLM	
			(1 () () () () () () () () ()	





DESIGN P	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	***************************************
CHECKED	APPROVED #	02045	REV. A
DATE		TITLE	SCALE
99.12.13		STEP MOUNTING PLATE	1:1
A	99.12.13	NEW ISSUE	***************************************



MATERIAL: 6061-T6 ALUMINUM (QQ-A-250/11) 0.188 THICK FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1

POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3

BREAK ALL SHARP EDGES 0.010 TO 0.020 MAX

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE IN INCHES